Country – Reference Guide
Version 1.0, December 1999

Summary: Country

Definition

The country of residence of a person or the location of a health care provider (an individual, group, or organization that provides medical or other health services or supplies).

Data Storage and Field Values

The variable name noted below specifically applies to the country of the current residence of the subject of the report. Refer to the section on Address in this Guide for information on other address-related data elements. Variable names for other uses of country, such as previous country of residence of subject, are not discussed in this document but will be discussed in subsequent releases.

Variable Name:	COUNTRY
Type:	character
Length:	45
Reported to CDC:	Yes
Field Values:	List of valid values is obtained from the ISO 3166/FIPS 104 reference file.

Note: As described above, standards and guidelines for country data are available from the International Organization for Standardization (ISO), a worldwide federation of national standards bodies from some 130 countries. A separate document on ISO-related reference tables is being planned, and will be available in the future.

Missing Values

If the value of the Country data element is missing, or does not adhere to the CIPHER standard, the data element may be noted as blank to indicate a missing value. If the program requires the reason the value is missing, a separate 1-character field should be used to note the reason for the missing data. The use of a Missing Value Reason data element must adhere to the CIPHER definition and rules associated with missing data as described in Appendix I - Missing Value Reason.

Processing Overview

Special requirements apply. Refer to the Implementation subsection on Data Processing: Validations and Edit Checks, below, for detailed information.

EDI Summary

Note: EDI sections are under construction.

Discussion

The CIPHER Country data element concept is intended to be a general concept that can apply to a person or an organization. A program may be interested in capturing information on Country associated with a particular event (e.g., Country of Birth; Country of Origin [primary country of residence]; Country of residence at onset of illness, and so forth).

In addition, CIPHER recognizes the need to support FIPS/country names used in the past, irrespective of whether country boundaries or names are now different. Thus CIPHER supports the use of an ISO 3166/FIPS 104 Reference Table equipped with a set of table identifiers. The Reference Table is the source of valid values for the Country data element. In addition, the table identifiers are used to track and catalog the version of the reference table that is currently active/supported at the time of collection of Country data. (Refer to the Implementation subsection on Data Processing: Validation and Edit Checks, below, for additional information.)

Note: The CIPHER Country format is compliant with the hybrid Country format supported in the Common Data Element Guide prepared by the Health Information and Surveillance Systems Board's Standards and Liaison Committee (HISSB S&L CDE Guide).

Implementation: Country

The implementation examples noted below specifically apply to the country of the current residence of the subject of the report. Refer to the section on Address in this Guide for information on other address-related data elements. The implementation for other uses of country, such as previous country of residence, can be patterned after these implementation examples.

Data Collection: Hardcopy Report Form

Country data are collected on the hardcopy report form through a free-form entry field. Refer to Figures 1 and 2 for examples of hardcopy forms used to collect Country data.

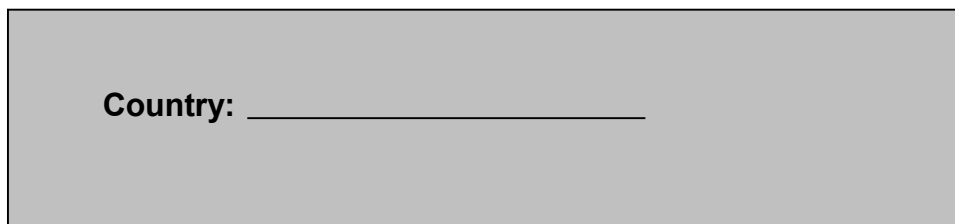**Figure 1:**   **Blank Hardcopy Form section used to collect Country data**

Country: _____

Figure 2:   **Completed Hardcopy Form with name of Country indicated**
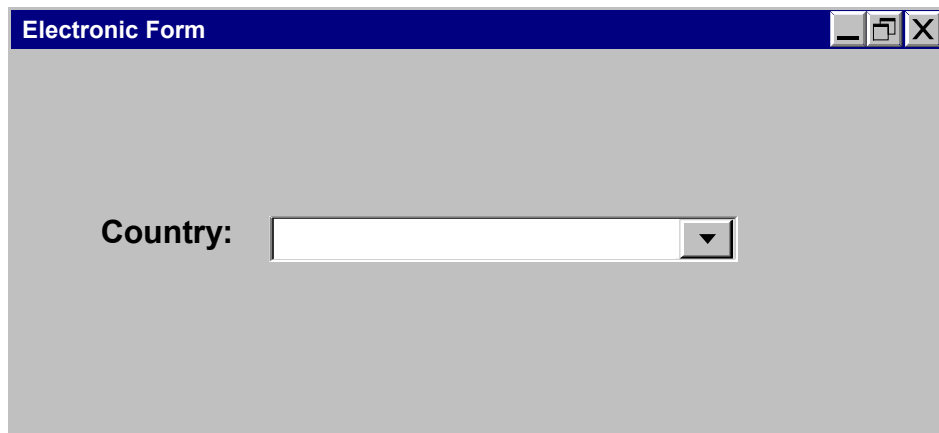
Country: __US_____

Missing Values – Hardcopy Form

Examples of hardcopy forms using the associated Missing Value Reason data element can be found in Appendix I – Missing Value Reason. The hardcopy form need only contain a missing value reason if the program requires the rationale for a missing value for Country.
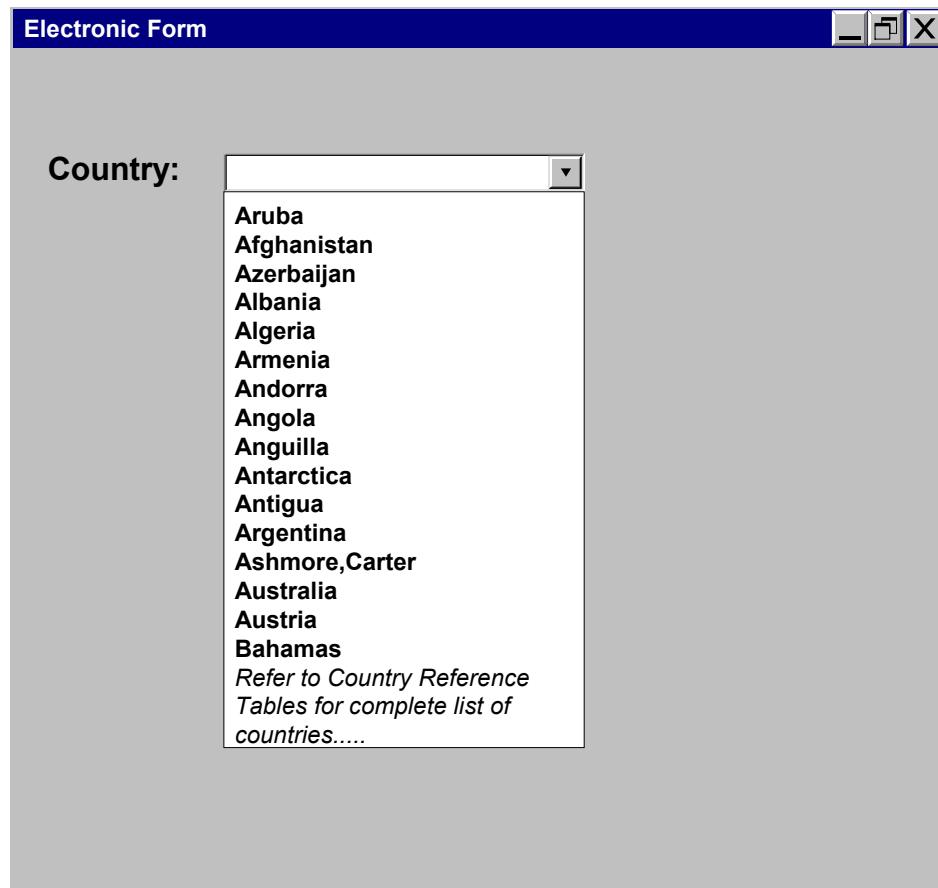
Data Entry: Electronic Forms

A pull-down menu is used to display entry options for Country, as shown in Figures 3 and 4. As discussed in Data Processing: Validations and Edit Checks, below, the Country data element is coupled to a reference table. As illustrated in the figures below, the valid values displayed in the pull-down menus associated with the Country data element are dictated and controlled by these externally obtained but internally maintained reference tables.

Figure 3:   **Blank Electronic Form used to collect Country data**

Figure 4:   __Electronic Form used to collect Country data with pull-down menu enabled.__

Electronic Form

Country:

Aruba
Afghanistan
Azerbaijan
Albania
Algeria
Armenia
Andorra
Angola
Anguilla
Antarctica
Antigua
Argentina
Ashmore,Carter
Australia
Austria
Bahamas
Refer to Country Reference
Tables for complete list of
countries.....

Missing Values – Electronic Form

Examples of electronic forms using the associated Missing Value Reason (MVR) data element can be found in Appendix I – Missing Value Reason. The electronic form needs to handle the Missing Value Reason only if the program requires the rationale for a missing value for Country. If the user selects a missing value reason code during data entry, the Country field will be blank and the screen will display the MVR information next to the blank field.

Data Processing: Validations and Edit Checks

Data elements entered in the electronic form will be edited as outlined below. If the program elects to use an associated Missing Value Reason data element for Country, it will be edited as outlined in Appendix I – Missing Value Reason.

The valid values for the Country data element are obtained from the ISO 3166/FIPS 104 reference table. Each reference table contains a set of table identifiers (*version, date effective,* and *date ineffective*) that are used to track and catalog the currently active/supported version of the reference table. As reference tables are modified, a "snapshot" of the previous version of the table is taken and stored before updating and replacing the table with the current version. This enables programs to access previous active versions of reference tables. Furthermore, these identifiers enable programs to track the version of the reference table that was accessed at the time the data were entered/stored in the record. This is advantageous in situations in which the stored data, based on an older reference file, have changed or are no longer supported in the current version of the reference file. In such cases, a program can enable access to the "snapshot" of the reference table data that were active and supported at the time the data were originally entered.   (A separate document on Reference Tables is being planned, and will be available in the future.)

The above-noted Reference Tables also contain additional FIPS data including Country FIPS codes associated with the textual descriptions. A component (to be developed in the future) can be used during analysis to access data in the reference tables other than the textual descriptions that are stored in the CIPHER record. The textual descriptions stored in the CIPHER record serve as a link to the reference table data.

The association to Reference Files, as well as the cross-mapping of values, are performed through the system control for Country. The illustrations in this section represent a portion of the controls available through the Country system control. A case in point, the values displayed in the pull-down box can be more narrowly defined through the action of keying in only the first few characters of the entry text.   For example, the entry operator can key in "PE" in the Country field. The list of valid countries displayed in the pull-down menu will contain all countries that start with the characters "PE".   For more information on other features available through this control, refer to the System Architecture Guide.

Data Processing: From Hardcopy to Storage

The following example illustrates the flow of information from data collection on the hardcopy form, to data entry into the electronic form, to validations and storage in the database.

The process begins with the blank Hardcopy data collection form used to collect Country:

The Country information is captured on the form, creating a completed Hardcopy data collection form:

The process continues with a blank Electronic form/data entry screen used to capture Country:

The value from the hardcopy form is entered into the Electronic form/data entry screen with the use of drop-down lists of valid values, and then the edits and validations are performed on Country:

The completed <u>Electronic form/data entry screen</u> is redisplayed and Country is stored in the database:

<u>Data Transmission: Electronic Data Interchange</u>

Note: All Country-related data will be formatted using the appropriate set of unique identifier codes noted in the CDC/Census Country Classification table, prior to any type of electronic data interchange.

The remainder of the EDI section is under construction.